

# Impact of Personnel Policies on Columbia's Critical Electric Infrastructure and How to Fix It

## Report by Retired Employees of the Columbia Electric Utility

Annual data regarding the number, and length, of power outages shows that the Columbia electric system is one of the best maintained systems in the state of Missouri, if not in the United States. We fear the current high level of reliability has caused City management and the City's governing body to be complacent in addressing an issue that is already a safety issue for employees and will begin impacting reliability for customers.

Six months ago (Monday, June 18) our group of electric utility retirees attended the Columbia city council meeting to ensure that councilmembers were aware of the loss of experienced line workers to other utilities. We defined the situation as a critical issue that needed to be addressed immediately. In the ensuing months, we have written to the city council, spoken at Water & Light Board meetings, and written opinion articles in the Columbia Tribune to keep the issue at the forefront of the problems that city management should address. Comments by councilmembers indicate concern and understanding, but no action was taken to address the issue. The city manager noted that a "study" was needed, though a city-wide study of salary ranges had already begun when that statement was made. We do not have confidence that a review of problematic policies will be included in the current study, or that the seriousness of the electric worker shortage will be understood or addressed in that study.

In June we reported that, in the previous three years, eight line workers had left the electric utility for better pay. Since June, two additional line workers have gone to other electric utilities for better paying jobs; one line foreman has retired; and, one line worker has retired due to work related disability. Several of our group have been asked by Columbia residents and ratepayers how this situation occurred; what could be done to address the issue; and, why nothing has happened to date.

To address the "how" and "what" questions, and to hopefully spark action to resolve the problem, we have written a report to provide detail and context to the issue. This report is to help customers understand how this situation was created; and, what changes need to be made to ensure that the Columbia electric utility can be operated safely and reliably in the future. We recommend citizens' questions regarding inactivity or indecision about this critical issue be submitted to council members.

### **SUMMARY POINTS:**

We encourage all electric rate payers to read the full report to gain a better understanding of the seriousness of the situation we have outlined. We understand that there is a significant amount of information and offer the following brief points.

- The Columbia electric utility has lost numerous employees to other utilities that pay higher salaries. Two local electric cooperatives pay substantially more than Columbia.
- The utility is unable to hire qualified employees from other locations due to non-competitive pay.
- Only 51% of the authorized positions, that maintain the energized electric system, are filled with adequately trained personnel. Twenty-one percent of those trained personnel can retire at any time.
- Only half the usual number of crews are currently put in the field on most days. Often fewer crews are available, due to vacations, illness, or injury.
- Hundreds of thousands of dollars' worth of equipment are idle because there is not staffing to use the equipment.

- Contract crews, from private sources, are over twice as expensive as in-house crews. Use of contract crews has caused additional funding to be needed in the capital project used to replace and maintain the existing overhead system.
- To retain and recruit qualified employees, a competitive salary with incentives for high performance is needed immediately.

## **BACKGROUND:**

**Our Qualifications** – As former employees of the Columbia electric utility, we believe our experience and perspective on this issue is unique. The following is our combined experience:

168 years of experience working for the utility  
 55 years of experience as line workers  
 41.5 years of experience as line foremen  
 15 years of experience as electric distribution superintendents  
 5.5 years of experience as electric distribution manager  
 32 years of experience in electric utility financial data analysis  
 18 years of experience developing and managing the electric utility annual budget

**Recognized Bias** – We acknowledge that we are biased because of our genuine concern for the safety of the remaining workers and we are frustrated by what appears to be a lack of concern by people in authority to address the issue. Further, we recognize that existing Columbia personnel policies have had a detrimental impact throughout city government. Also, we can identify positions within the electric utility where serious staffing issues will negatively impact the future of the utility; however, the purpose of this report is to focus solely on the positions that directly maintain the electric system. It is our opinion that the loss of staff knowledge and experience must be addressed immediately and that continued delay in corrective action will impact the customers of the electric utility and is a danger to the remaining employees that maintain the system.

**Primary Job Responsibilities** – The work maintaining the electric system is highly technical, physically demanding and extremely dangerous. Employees routinely work on an energized system at the building service level of 120-240 volts; at the distribution level of 14,800 volts; and, at the transmission level of either 69,000 or 161,000 volts.

Climbing poles with equipment or working overhead from a bucket truck takes a physical toll on employees during normal work conditions. Under emergency conditions, at night or during and after a storm, the danger and potential for injury is magnified.

The Columbia electric system consists of almost 70 miles of transmission line; 863 miles of distribution lines; 8 substations (the interchange between transmission and distribution voltage); 12,000 distribution transformers; 22,800 poles; 10,000 streetlights; and, over 53,000 meters. During fiscal year 2018, 12.5 miles of the distribution system was added or rebuilt. Depending on annual growth between 500 and 1,000 customers are added each year.

**Primary Positions** – Only 47 positions are authorized and responsible for building and maintaining the Columbia electric system – physically working on the energized system. The position titles are: journeyman line worker; line foreman; substation technician; and, substation foreman. There are four-year apprenticeships for both the line worker and substation technician positions. At any time, a limited number of employees participate in the apprenticeship program. While completing the apprenticeship program the employees are closely supervised and cannot work independently.

In addition to the 47 positions, three superintendent positions that have direct daily responsibility for determining crew assignments and work priorities based on their knowledge of the skills of the employees available and the complexity of the tasks.

The chain of succession, needed to build the skills and abilities for supervising, is apprentice; line worker/technician; foreman; and, superintendent. The following table shows the current staffing situation:

Position	Authorized Positions	Current Staff	Trained Staff
Apprentice Line Worker*		8	
Journeyman Line Worker*	29	10	10
Line Foreman	12	11	11
Apprentice Substation Tech*		3	
Substation Tech*	3	0	0
Substation Foreman	3	3	3
<b>Total Positions</b>	<b>47</b>	<b>35</b>	<b>24</b>

Source – City of Columbia budget information and employee interview

\* - total includes apprenticeship – for line worker, 2 positions are currently underfilled with dispatcher positions

Note: Five of the “trained staff” are eligible to retire at any time

**Definition of Problem** – The utility industry has been dealing with the issue of an “aging workforce” for years. Developing, and keeping, skilled workers has been an issue throughout the industry. The most talented employees expect to be paid appropriately for their skills. For several years, the Columbia electric utility has been unable to hire experienced line workers from outside the utility because the pay scale was not high enough to attract qualified applicants. To develop line workers, the utility would hire personnel into an entry level position and then promote employees into the four-year apprentice program. The total time required to move a new hire through the required training to become a line worker is five years.

Another five years of experience, as a line worker, is necessary for an employee to have a full understanding of the situations that can occur in the electric system and to properly supervise apprentices. Historically, employees promoted to a line foreman position had between 10 and 15 years of experience as line workers.

While not ideal, the system of training and promoting internally had worked successfully for several years. The pay scale wasn’t enough to attract outside talent, yet it was enough to be competitive and not lose employees to other utilities. That changed as other utilities continued to increase their pay scales and Columbia enacted a series of policies that were detrimental to the pay scale and benefit package offered to employees.

**Impact on current system** – The Columbia electric system has been maintained at a high level; however, the loss of experienced workers and the inability to hire from outside the organization has already had a significant impact on the system that is not readily apparent to ratepayers. These include:

1. The limited availability of line crews (half) means that not as much work can be done with a general reduction in system maintenance.
2. Equipment has been purchased with the assumption of full staffing. With the reduced availability of staff, hundreds of thousands of dollars of equipment are sitting unused.
3. Because there are no substation technicians, a foreman must be available for any substation work to be performed.

4. While many smaller utilities de-energize circuits to perform maintenance, Columbia has completed much of the maintenance work while the circuits are hot. This is a safety issue that requires highly experienced personnel. With the loss of personnel, more maintenance outages are now being taken.
5. Hundreds of thousands of dollars in being spent on a contract crew for work that could be performed by Columbia staff, if staffing was at the authorized level. The following table illustrates the cost differential between an in-house crew and a contract crew. *Note: The contract rate amount listed is the hourly rate paid to the contract company, not to the contract employees.*

Position	Columbia Rate*	Contract Rate**
General Foreman		\$106.85***
Line Foreman	\$49.29	\$101.15
Line Worker	\$44.77	\$95.75
Line Worker	\$44.68	\$95.75
Line Worker	\$44.77	\$95.75
Apprentice	\$39.09	\$71.95
Equipment	Columbia Rate*	Contract Rate**
Digger Derrick	\$9.28	\$28.19
Bucket Truck	\$10.70	\$26.99
Crew Cab	\$3.91	\$15.38
Total Hourly Cost – Personnel & Equipment	\$246.49	\$637.76

\*Representative employee hourly rate plus 41% benefit cost. Equipment rate based on total cost divided by 2,000 hours per year over 10-year standard replacement schedules

\*\*Contract rates listed in City of Columbia contract 56/2015 renewal period August 1, 2018 – July 31, 2019

\*\*\*Required position charge even with for one contract crew

## POLICIES AT FAULT:

Based on our experience while working for the City of Columbia, including discussion with employees at the time and attempts to address the loss of personnel, we believe that the following policies have had a significant negative impact on the employee retention.

**Lack of merit raises** – For at least seven years, no merit raises were given to employees of the City of Columbia. The result was that high-performance employees saw no reward for exceptional work. Based on our observations while still employed by the city, this policy had a significant impact on morale throughout the city and started talented employees looking at other options. Many high-performance employees have left the City of Columbia to join organizations that recognize the need to reward high performance.

**Raises based on the concept of “move to mid-point”** – City management decided to fund a salary concept called “move to mid-point”. The theory was that employees that had worked in a position for five years should move to the mid-point of their pay range. The implementation of this policy was highly unpopular among good employees as there was no consideration of merit in deciding that employees should move to the mid-point. This meant that low performing employees and high performing employees were moved at the same rate. In addition, high performing employees that were promoted would be “reset” in the five-year count and may end up making less than if they had not taken the promotion. In our view, this was a “participation ribbon” concept that is appropriate for young children but had a negative impact on city staff and has reduced the overall skill and knowledge of the workforce.

The impact was even more severe on the morale of line workers. Unlike most other positions in the city, the starting salary for line workers is the mid-point of the salary range in which their position is listed. This meant that they were never eligible for the move to mid-point policy. The result was that line workers received little or no pay raises for several years. *Note: The current line worker salary range is \$25.044 to \$38.693, with \$30.679 being listed as the mid-point. Mathematically \$31.869 is the mid-point, but the Human Resources Department set it at \$30.679 and that is the starting salary for employees that complete the apprenticeship program and become line workers.*

**Ignoring Department Head Concerns** – Department heads were often overruled when attempting to address staffing needs. They were restricted from offering counter offers to high performing employees that were recruited by other employers. They were overruled when attempting to hire highly qualified and experienced staff from outside the organization if the salary offered was higher than what the Human Resources Department determined appropriate. This occurred even though the salary was within the defined range for the position. This effectively hampered the ability of department head to manage their operational requirements.

**Setting pay scale at median of competitive market** – Based on the recommendation of the city manager, the City Council adopted policy resolution PR 194-13 on October 7, 2013. The policy stated that “the City of Columbia targets benefits and compensation levels at the median of the competitive labor market.” Median means middle. Columbia established a policy that told employees, and prospective employees, that 50% of the competitive market would pay more than an employee would receive by working for Columbia.

The following table illustrates the pay differential of some of the municipal and rural cooperatives that pay higher than the median of the competitive market. The table does not represent a complete survey of utilities that compete for Columbia’s personnel. Investor owned, and electric cooperatives are not subject to Missouri sunshine laws and do not need to supply salary information. The information on the two electric cooperatives is based on data from former Columbia employees. *Note: In recent years, Columbia has lost employees to Independence, Hannibal, Boone Electric Cooperative, and Howard Electric Cooperative.*

Starting Salary for Line Workers – Selected Municipal Utilities and Cooperatives in Missouri			
Utility	Hourly Salary	Annual Salary – 2,080 Hours	Total Dollars Difference from Columbia
Columbia	\$30.679	\$63,812.32	\$0.00
Independence	\$49.70	\$103,376.00	\$39,563.68
Springfield	\$38.97	\$81,057.60	\$17,245.28
Hannibal	\$34.37	\$71,489.60	\$7,677.28
Monett	\$35.50	\$73,840.00	\$10,027.68
Boone Electric Cooperative	\$39.93	\$83,054.40	\$19,242.08
Howard Electric Cooperative	\$36.50	\$75,920.00	\$12,107.68

Source for municipal utilities – Missouri Public Utility Alliance

Source for electric cooperatives – statement from Columbia employees hired by cooperatives

**Eliminating the “Rule of 80” from retirement benefit** – A July 16, 2012, report to Council (REP 108-12) states the fiscal impact of “the elimination of the “80 and Out Rule” for new employees results in a reduction of the City’s future contributions rates to LAGERS of .9% for the Utility group and .7% for the General group. This results in an estimated a combined \$6 million reduction in liabilities over 20 years.”

“Utility” workers are a separate group within the LAGERS system. LAGERS is the Missouri Local Government Employees Retirement System that provides employees with a defined pension after retirement. The Rule of 80 allowed employees to retire after the combination of their age and their years of service equaled 80. While most may not do it, a 20-year-old that worked 30 years could retire at age 50. The elimination of the Rule of 80 changed the minimum retirement age to 60. This was a significant change for a physically demanding job like line worker.

Based on the .9% reduction quoted in the 2012 report to council, the fiscal year 2018 impact on the electric utility was less than \$14,000 out of the \$1.5 million paid into the LAGERS system for all electric utility workers. In our opinion, this decline in benefits, coupled with the non-competitive pay, has a significant impact on the ability of the electric utility to maintain its’ workforce and recruit from outside the organization.

## **RECOMMENDATIONS:**

Our recommendations are focused on the priority of retaining and recruiting employees to maintain the electric system and ensure a reliable utility. We believe these changes will stop the loss of trained staff, including providing an incentive for those eligible to retire to remain employed for a few more years. If these recommendations are enacted, we believe the Columbia electric utility will be able to recruit qualified employees from outside the utility.

**Establish a competitive pay philosophy** – CBIZ, Inc. was the previous consultant for the Human Resources Department and indicated that \$38.693 an hour was a competitive pay scale for the line worker position. That amount was established as the top of the range instead of the starting salary.

### **Line Workers & Substation Technicians**

- The \$38.693 hourly rate should be the starting salary for line workers and substation technicians when they complete the apprenticeship program.
- Existing employees should be moved above the \$38.693 level as far as they are above the current starting salary of \$30.679. *For example, an existing employee paid \$31.679 per hour would be paid \$39.693.*

### **Line Foreman and Substation Foreman**

- The range for foreman should start 10% higher than the line worker and substation technician range (\$42.562 per hour).
- Existing employees should be moved above the new starting salary based on their current salary.

### **Superintendent**

- The superintendent range should be 10% higher than the foreman range (\$46.818 per hour).
- Existing employees should be moved above the new starting salary based on their current salary.

### **Recruitment of qualified applicants**

- Based on the experience and qualifications of outside applicants, the utility director should be allowed to determine the appropriate salary to recruit employees, within the salary range for the position, from outside the utility.

**Eliminate “move to mid-point”** – In our opinion, this was a bad policy when established and it has diminished the work ethic of the city’s workforce. Showing up to work for five years should not be the basis for moving an employee to a higher salary, performance should be the basis.

**Expect excellence and reward excellence** – If city management wants to encourage high performance employees, merit raises should be the funding priority for any raise. There should be a real merit system that provides the highest merit raises to the highest performers. While low performers would get no raise, they should be coached in how to increase their performance level so that they can receive raises in the future. A commitment of 2% merit raises per year, for the next five years, should be provided for the positions outlined in this report.

**Implement Rule of 80 for Utility group** – As previously stated, the “Utility” group is a separate group within the LAGERS retirement system. All five city utilities have significant staffing issues. Returning to the Rule of 80 would help recruit new employees. The financial impact to the utilities would be minimal as the original justification for the change indicated the savings would be less than 1% of the funds paid into the LAGERS system.

**Allow department heads to manage their operational needs** – In our opinion, department heads should make the final decisions regarding their operational needs, not the Human Resources Department. The Human Resources Department should be responsible for maintaining legality in the hiring process and ensuring discrimination does not occur. Salary, based on the qualifications and experience of the recruit, should be the responsibility of the department head. This includes the obligation to be transparent to the public and justify the salary paid for the work done.

#### **IMPACT ON BUDGET:**

**Short-term budget impact** – We do not believe there will be a short-term impact on the electric utility budget to address the retention and recruitment issue related to the positions that maintain the electric system. This is because ten line worker positions are funded in the annual budget but not filled (there are twelve vacant positions, but two positions are currently reassigned). Until the utility can rebuild to near full staffing, the funds available for the unfilled positions should cover the cost of increased salaries to existing staff.

Currently, the electric utility’s total personnel cost is 11% of the total operating budget. The electric utility operating budget is separate from the capital projects budget. For the identified positions, most of the expense occurs in the operating expense budget. Over the last seven fiscal years, the actual operating expenses have averaged \$7.4 million less than the budget amount. The following table shows that the annual difference between budget and actual.

Total Annual Operating Expenses for Electric Columbia Electric Utility				
Fiscal Year	Budgeted	Actual	Under Budget \$\$\$	Under Budget %
FY13	\$104,279,087	\$100,165,000	\$4,114,087	3.9%
FY14	\$108,354,519	\$102,891,745	\$5,462,774	5.0%
FY15	\$108,012,850	\$100,023,214	\$7,989,636	7.4%
FY16	\$108,875,093	\$97,993,951	\$10,881,142	10.0%
FY17	\$110,287,378	\$102,880,304	\$7,407,074	6.7%
FY18*	\$106,106,639	\$97,410,946	\$8,695,693	8.2%

Source – Columbia Water & Light Department financial statement and Columbia Finance Department

\* FY18 information is unaudited. Final “actual” numbers could change but are unlikely to be materially different.

Not funding competitive salaries has already resulted in increased cost from using contract crews. That expense is occurring in the capital project budget and not in the operating expense budget. The work being done could be done by fully staffed city crews. Hiding increased cost in non-personnel accounts misrepresents the real cost of bad policy.

**Long-term budget impact** – Utilities are businesses that should be operated as businesses. We believe there are two possible long-term paths for all five Columbia utilities.

1. Establish a competitive pay philosophy and provide incentives to high performing employees through merit raises to ensure adequate staffing for proper maintenance and address future outages.
2. Allow critical infrastructure to deteriorate resulting in service interruptions and higher costs from contract labor.

Paying competitive wages and expecting high performance does not necessarily mean that personnel costs will increase as a percentage of the total budget. We believe that employees will respond to clear expectations and rewards.

As we previously stated, all the utilities have been negatively impacted by the policies we identified. The actual impact of salary changes should be closely monitored and reported each year during the budget process.

Highly qualified and motivated employees should be a priority for maintaining critical infrastructure.

The following people contributed to this report and are former employees of the Columbia electric utility.

Steve Casteel – Retired Electric Distribution Superintendent

Tony Cunningham – Retired Electric Distribution Manager

Pat Karl – Retired Electric Line Foreman

Bruce Perkins – Retired Electric Distribution Superintendent

Jim Windsor – Retired Assistant Director of Utilities